I think that there are some serious problems with this technology.

1. RF signals on power lines will radiate. The power lines will be turned into large horizontal antennas that will radiate these signals. These signals will interfere with licensed and governmental users of the affected spectrum. Severity of the interference will vary by frequency and distance from the power lines as with the power level of the BPL signals.

2. First responders (police officers, firemen, medical personnel, and amateur radio operators) will greatly be hampered by this wide spread, broad band interference. Federal and State governments are spending large sums of money to expand and unify emergency RF communications networks as part of the war on terror. Yet the Federal Communications Commission is now promoting a technology that could render these networks virtually useless.

3. Power line RF notch filters have been proposed in some countries as a means to protecting specific frequency bands (including amateur radio). But if these filters are to be used to protect amateur radio and public service emergency communications, the bandwidth available for BPL would be greatly reduced. It is a sure bet that proper maintenance of these filters will be an ongoing problem. Amateur radio operators in many areas are already continuously plagued with power line noise from poor power line maintenance.

4. There is a strong probability that BPL will interfere with itself. If each power line is used as a separate RF circuit, the mutual RF reception will generate unacceptable cross talk which will reduce the connection speed and bandwidth of the affected circuits. It is very possible that BPL will be high speed and broadband in name only.

5. Higher frequency RF has a limited range on a wire. The higher the frequency, the shorter is the useable distance of the RF signal. Increasing the power will extend the range. but it will increase the radiated interference. If only the last mile of a power line is used for BPL, the economics of such a system means that rural users will not have use of this service and the cost for urban users will be similar to CATV and DSL systems.

6. There is a very serious public safety issue with BPL. Power line step down transformers block RF signals. RF bypass devices will have to be installed on these transformers. Lightning and long term wear and tear often causes these transformers to partially short out which raises the line voltage coming into homes and businesses. What will happen when an RF bypass device shorts out? What will 12 kilovolts do to premises, wiring, and machines designed to run on 120 volts AC. The fire and safety hazard is very bad. Life and property is in jeopardardy.